

# MING CHI

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## Skills

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### Programming Languages

C++ (primary, 5 years of usage)  
Java (2 years of usage), C#

### GIS

ArcGIS, Google Maps API, R-spatial

### Web Developing Technologies

HTML, JavaScript, CSS, AJAX, XML,  
JSON, Bootstrap, Java Servlet,  
JQuery, JSP, Rest API, PHP  
MySQL, Apache Derby, SQL Server

### Script Languages

R, Python

### Other

Facebook Presto DB, GIT  
Amazon AWS Server, Ubuntu  
Linux, Windows, Android

## Education

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### MASTER OF SCIENCE IN INFORMATION SCIENCE

University of Pittsburgh, 2014.8 – 2016.4, GPA: 3.955

### BACHELOR OF ENGINEERING

China University of Geosciences, 2010.8 – 2014.4, GPA: 3.955, Major: Geographic Information System

## Software Developing Project Experience

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### HAIL2BOOKS (ONLINE E-BUSINESS SYSTEM) – 2016.4

- **Description:** Online shopping system for books. Main functions include: Shopping cart, Recommendation (people bought this also bought), Combination search (support multiple case-insensitive keywords and choosing category), live chat with service desk. Passwords are stored as MD5. Employees have separate portal and can respond to users.
- **Keywords:** Recommendation, Keyword search, Servlets, JSP, JSON, JQuery, AJAX, HTML, CSS, SQL.

### ONLINE CHAT SYSTEM - -2016.3,

- **Description:** Online social system. Main functions: Chat, search user, friends list with online/offline status.
- **Keywords:** Rest APIs, Servlets, JSP, JSON, AJAX, HTML, CSS, SQL.

### SOCIAL RESUME SYSTEM – 2015.12

- **Description:** Online social resume system. Main functions include: Upload Resume design, back-end convert pdf to image, Online Resume generator (front-end only), Resume gallery, and user comment.
- **Keywords:** Servlets, JSP, JSON, AJAX, HTML, CSS, SQL, Database.

### DISTRIBUTED DATABASE QUERY REST SERVICE USING FACEBOOK PRESTODB – 2015.2 - 4

- **Description:** A query restful service based on Facebook's presto DB, to provide support for querying the whole distributed database system. Deployed on Amazon AWS Ubuntu server.
- **Keywords:** Rest APIs, Facebook's presto DB, Amazon AWS Server, Ubuntu, JSON, AJAX, HTML, CSS, JQuery, Knockout.js, MySQL.

### ANDROID GAME-LIKE APP FOR JAVA LEARNING - -2015.2 - 4,

- **Description:** Mobile app for learning java. Tests are arranged in sections and users can track progress.
- **Keywords:** Android, UI designing, JSON, Multi-threading.

### **ANDROID PROTOTYPE APP FOR SOCIAL GIS -2015.4,**

- **Description:** Mobile app for social interacting. Users get informed if a friend is within certain range.
- **Keywords:** Android, GIS, Google Maps API.

### **PROTOTYPE GIS NAVIGATION WEB SYSTEM FOR DISABLED PEOPLE -2015.3,**

- **Description:** A GIS navigation system which reads instructions and listens to users.
- **Keywords:** Text to Speech, Speech to Text, GIS, Google Maps API, JQuery, HTML.

### **ONLINE SHOPPING SYSTEM - -2014.12,**

- **Description:** Online shopping system, with most effort focusing on database design.
- **Keywords:** PHP, HTML, CSS, MySQL, Database.

### **DIGITAL WATERMARKING SYSTEM FOR VECTOR SPATIAL DATA - 2014.1 - 6,**

- **Description:** Digital watermarking system to handle watermark embedding and verification. Using C# as front-end and C++ DLL as back-end. This is a test plugin project for MapGIS 10.
- **Keywords:** C#, C++, DLL, GIS, DFT, Multi-threading, Plugin Development.

### **SNAPPING TOOL FOR RESEARCHERS ON WINDOWS - 2013.3 – 2014.10,**

- **Description:** App on windows to help students and researchers. Besides regular snapping functionality, user can select area of interest, and snap that area (Good for those using MATLAB, R, etc.). Different hotkeys are assigned to full screen snap and partial snap. Users can set auto name and save to image, or to clipboard.
- **Keywords:** C++, MFC, Self-developed Application.

### **PROTOTYPE GIS SYSTEM - 2012.10 – 2013.1,**

- **Description:** A GIS system built without open-source libraries. Layers are overlaid. Users can create layers, edit vector data (point, line, polygon, text).
- **Keywords:** C++, MFC, GIS, GDI, Computer Graphics, SQL Server, interface definition, Event handling.

### **SCHOOL-BUS MANAGEMENT GIS SYSTEM - 2012.6 – 2012.11,**

- **Description:** School-bus management system, with a combination of spatial database and traditional database. Adobe flex (now adobe flash builder) as design. A MapGIS development contest project.
- **Keywords:** Adobe Flex (flash builder), GIS, Oracle.

### **GRAPHICS DRAWING SYSTEM - 2012.1 – 2012.6,**

- **Description:** Accept user input graphic parameters, or UI events, to draw graphics on screen.
- **Keywords:** MFC, C++, Event Handling, Computer Graphics, GDI.

### **LIBRARY MANAGEMENT SYSTEM – 2011.5**

- **Description:** Library management system, which helps student to search for available books and for librarians to manage borrows, new books, lost books, and returns.
- **Keywords:** MFC, C++, SQL Server.

## **Certificate**

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**MAPGIS ENGINEER** - Certified by Zondy Cyber Group. 2012/11/15 – now

For more images and information about projects, demos, self-developed apps:  
Please visit: <http://ndsorrowchi.github.io/html/past-projects.html>,  
Or, visit my LinkedIn Profile at <http://www.linkedin.com/in/ndsorrowchi/en>